

# New North American *Euvrilletta* and *Xyletinus* with Keys to Species (Coleoptera: Anobiidae)

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## ABSTRACT

The new species *Euvrilletta californica* from California and Nevada, *E. serricornis* from Nevada, *Xyletinus obsoletus* from Nevada, and the new subspecies *X. mucoreus variabilis* from Maryland, are described. An identification note is given for *X. distans* Fall. Keys are given for the North American species of *Euvrilletta* and *Xyletinus*; illustrations are presented.

The following descriptions of 3 new species and a new subspecies result from study of collections recently sent to me for identification.

*Euvrilletta californica*, n. sp.  
(Fig. 2, 3)

*General*.—Elongate-cylindrical, body 2.6 to 2.7 times as long as wide, elytra nearly parallel-sided at about basal 3/5; body color beneath pubescence orange or red-brown to moderately dark brown, color of legs as that of body, antennae more or less orange-brown; pubescence tan, with a silky sheen in proper light, moderately dense, obscuring surface, mostly appressed, dorsal surface and head with short, bristling hairs.

*Head*.—Surface with very small, moderately dense granules on a nearly smooth, shining, finely punctate background, vertex with a fine, longitudinal carina, a fine groove adjacent to eye; eyes of female small, bulging, separated by 4.7 to 4.8 times frontal width of an eye, eyes of male moderately large, bulging, separated by 2.4 to 3.3 times frontal width of an eye; antenna of male about 0.6 times as long as body, segment 3 weakly serrate, segments 4 through 8 more distinctly serrate, each of these 5 segments progressively more elongate than 1 preceding it, 9th segment 1.4 times as long as segment 8, segments 9 through 11 as long as 7 preceding segments combined, segments 9 and 10 weakly serrate, each about 3.5 times as long as wide, 11th segment 5 to 6 times as long as wide; antenna of female a little less than 1/2 as long as body, segments 3 through 10 moderately serrate, last 3 segments united as long as 6 to 7 preceding united. Last segment of maxillary palpus subfusiform, that of male nearly 3 times as long as wide, that of female about 2 times as long as wide; last segment of labial palpus

subfusiform, that of male about 3 times as long as wide, that of female about 2 times as long as wide.

*Dorsal surface*.—Pronotal disk nearly evenly rounded throughout in both sexes, very slightly depressed at base each side of center, often slightly depressed along margin above anterior angle, extreme side in male sometimes flattened, usually nearly evenly rounded, sometimes slightly, broadly bulging, side in female broadly, more distinctly bulging than in male; lateral margin in male complete, usually narrowly produced, sometimes moderately produced and explanate, lateral margin of female sometimes (1 of 3 specimens) incomplete anteriorly, margin narrowly produced; sculpture at side of pronotum of small (moderately dense) granules on a very finely granulate surface. Scutellum about as wide as long, apex rounded to somewhat pointed. Elytra more or less distinctly striate, each elytron with 10 complete, 1 short scutellar and 1 short subhumeral stria, striae of small, elongate punctures, intervals usually obscurely to weakly convex; surface extremely finely granulate; pubescence of female usually (2 or 3 specimens) forming weak vittae.

*Ventral surface*.—Metasternal carina behind middle coxae broadly angulate, metasternum longitudinally, more or less distinctly grooved at center, groove weak to absent basally; surface finely punctate-granulate. Abdomen with first suture more impressed than others, surface finely granulate-punctate; outer face of front tibia concave at apex only, outer face of middle tibia more or less flattened to concave at apex.

*Length*.—5.0 to 7.8 mm.

The holotype (male, no. 72496 in USNM) bears the data "SAN YSIDRO, CA; VII-25 1970; BLACKLIGHT."

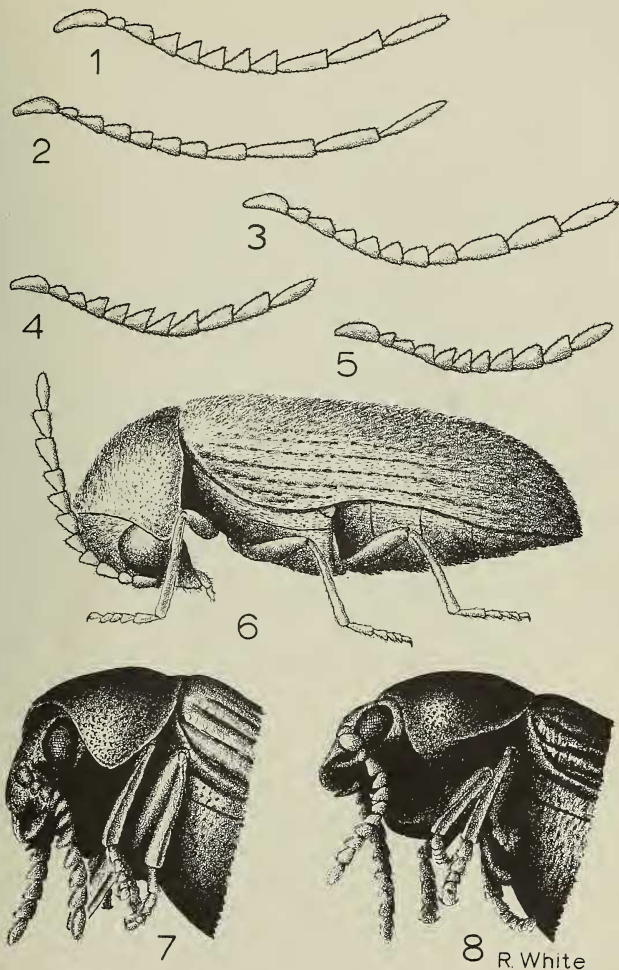


Fig. 1-5, Antennae: 1, *Euvrilletta serricornis*, n. sp., male holotype; 2, *Euvrilletta californica*, n. sp., male paratype; 3, *Euvrilletta californica*, n. sp., female paratype; 4, *Xyletinus distans* Fall, male paratype; 5, *Xyletinus distans* Fall, female holotype; Figs. 6-8, lateral views: 6, *Xyletinus variabilis*, n. sp., male holotype; 7, *Xyletinus fucatus* Leconte; 8, *Xyletinus obsoletus*, n. sp., male paratype.

The allotype (in USNM) bears the same data except that it was taken on VII-21, 1970. Four paratypes with the following data are in USNM: "Box Spr. Mats., Cal., Riverside; VII-9-64, G. E. Wallace; light", ♀; "Riverside, Calif., VIII-5-63; at light, E. I. Schlinger", ♂; "CAL., Alameda Co., 3 m. S. Sunol, 22-VIII-1971, W. H. Tyson; Collected at u.v. light", ♂; and "Riverside, Calif., VII-12-64; at light, E. I. Schlinger", ♂. Five male paratypes (4 in NDA, 1 in USNM) have the data "Oak Springs Summit, Lincoln Co., Nev., VIII-10-1971, elev. 6231'; G. M. Nishida, D. F. Zoller Collectors". One female (in NDA) bears the data "Reno, Nev., Washoe Co., VII-7-1966; R. C. Bechtel Collector". A single male specimen (in CAS) bears the following "Daggett, San Bern. Co., Cal. 7-22-57; D. Giuliani Collector". A male paratype (in William Tyson collection) bears the data "CAL., Alameda Co., 3 m. s. Sunol, 22-VIII-1971, W. H. Tyson; Collected at u.v. light". In total, 14 specimens have been seen.

For the differences between *californica* and *texana* VanDyke, its nearest relative, see the key, below, to *Euvrilletta* species.

*Euvrilletta serricornis*, n. sp.  
(Fig. 1)

*General*.—Elongate-cylindrical, body 2.5 to 2.7 times as long as wide, elytra nearly parallel-sided at about basal  $\frac{3}{4}$ ; dorsal surface, metasternum, and legs red-brown, pronotum and metasternum clouded with dark brown, head and abdomen very dark brown, head at vertex and apex, and abdomen at base more or less red-brown, antennae more or less orange-brown; pubescence tan, with a slight silky sheen in bright light, very short, not bristling, less than moderate in density, not obscuring surface.

*Head*.—Surface with small, moderately dense granules on a finely granulate background; vertex with a fine, longitudinal carina, weaker apically, attaining level of eyes, with an obscure groove adjacent to each eye; eyes of male large and bulging, separated by about 1.4 to 2.0 times frontal width of an eye; antenna of male just over 0.5 as long as body, 3rd segment serrate, segments 4 through 8 strongly serrate, 4 through 7 subequal, 8th a little longer than others, segments 9 through 11 as long as 7 preceding united, 9th and 10th serrate at apex.

Last segment of maxillary palpus subtriangular, over 2 times as long as wide, widest beyond middle, apex obliquely truncate; last segment of labial palpus subtriangular, about 1.6 times as long as wide, widest beyond middle, apex obliquely truncate.

*Dorsal surface*.—Pronotal disk nearly evenly rounded, pronotum at base each side of middle shallowly depressed, bulging at side, at side behind anterior margin and before bulge somewhat to distinctly depressed, lateral margin complete, moderately produced; surface at side with small, moderately dense granules on a finely granulate background. Scutellum about as wide as long, apex bluntly pointed. Elytra more or less clearly striate, each elytron with 10 complete, more or less clearly indicated striae plus a short scutellar and a short subhumeral stria, striae of small, elongate, impressed punctures, intervals weakly convex; surface at base with small, moderately dense granules on a very finely granulate background, small granules sparse to nearly absent over rest of elytron, fine granules occurring throughout.

*Ventral surface*.—Metasternal carina behind middle coxae small, angulate, metasternal surface finely, longitudinally grooved at middle, weak to absent at base; surface finely granulate-punctate. Abdomen with first suture slightly more distinct than others; surface finely punctate and minutely, obscurely granulate; outer face of fore and middle tibiae flattened nearly throughout.

*Length*.—4.8 to 5.8 mm.

The holotype (♂, in NDA) and 3 male paratypes (2 in USNM, 1 in NDA) bear the data "Sawmill Canyon, Nye Co., Nev., VII-21-1964, elev. 7600', Light trap; R. C. Bechtel, collector."

This species is most similar to *texana* VanDyke, and *xyletinoides* Fall; for the differences see the key to *Euvrilletta* species.

There is a female specimen (in NDA) which I have identified as *serricornis* or near. The metasternal carina is broadly arcuate; this and other differences from male types of *serricornis* cause doubts as to whether it is the female of *serricornis* or not.

The addition of *E. serricornis* and *E. californica* to our known fauna emphasizes the arbitrary nature of the distinction between *Euvrilletta* and *Xyletinus*. These genera are separated on the basis of the length of the last 3 antennal segments as compared with the rest of the antenna (club as long as all preceding segments combined in *Euvrilletta*, as long as 5 to 6 preceding in *Xyletinus*), but this distinction is not good, for there is no sharp

dividing line between the somewhat lengthened last 3 antennal segments of *X. distans*, through the moderately lengthened last 3 segments of *X. brevis* White, to the distinctly lengthened last 3 segments of *E. californica*, *E. sericornis*, and *E. texana*. I am convinced that a revision of the genera is desirable. In such an endeavor consideration should be given to restriction of *Xyletinus* to the small-eyed, stout-bodied species (these agree with *X. ater* the type-species), restriction of *Euvrilletta* to the type-species *xyletinoides*, and erection of 1 or 2 new genera for the remaining species now placed in *Xyletinus* or *Euvrilletta*.

*Xyletinus mucoreus variabilis*, n. ssp.

(Fig. 6)

*General*.—Elongate-cylindrical, body 2.47 to 2.50 times as long as wide, elytra nearly parallel-sided at basal  $\frac{3}{5}$ ; body color beneath pubescence as follows, head red-orange, darker red-orange (nearly brown) along mid-line and at top, pronotal color as on head, darker red-orange basally (nearly brown), lightest apically, elytra light red-orange to dull orange, ventral surface dark red-orange, metasternum clouded with brown, abdomen predominantly dark brown to nearly black, apex of each abdominal segment more or less lighter than remainder, legs (except tarsi) and first antennal segment red-orange, tarsi and antennal segments 2-11 dull light orange; pubescence of all surfaces semierect, moderately dense, with a light yellow sheen, more or less obscuring surface sculpture.

*Head*.—Front very finely, densely granulate, granules of 2 sizes; surface most strongly rounded at vertex, very shallowly depressed above eyes, vaguely, longitudinally carinate at center, with a narrow, more or less distinct groove over each eye. Antenna of male about 0.5 times as long as body (female not seen), segment 3 weakly serrate, segments 4 through 10 distinctly serrate, outer segments of this portion becoming more elongate, segments 4 and 5 similar, a little longer than wide, segment 6 as long as wide, wider than 4 and 5, segment 7 large, wider than 6, a little longer than wide, segment 8 as long, not as wide as 7, longer than wide, segment 9 as wide as 8 but longer, about 1.6 times as long as wide, segment 10 not as wide as 9, slightly shorter, more than 2 times as long as wide, 11th segment elongate-cylindrical, 4.6 times as long as wide, 9th through 11th segments as long as 5 preceding united. Eyes of male large and bulging, separated by 1.8 to 2.0 times frontal width of an eye. Last segment of maxillary palpus elongate, pointed, widest near middle, 2.4 to 2.7 times as long as wide; last segment of labial palpus similar to that of maxillary palpus, 2.5 times as long as wide.

*Dorsal surface*.—Pronotal disk nearly evenly rounded, at base slightly depressed each side of middle, at side flat or slightly concave, weakly undulate; lateral margin sharp, distinct, raised, more or less undulate between posterior and anterior angles; surface finely, evenly granulate throughout, granules of 2 sizes. Scutellum slightly wider than long, apex rounded. Elytra distinctly striate, each elytron with 10 complete striae, a scutellar stria and 2 short striae diagonally below humerus, striae irregular, of impressed, broken lines, or elongate punctures, intervals more or less convex; surface very finely, nearly evenly granulate throughout, intervals with minute, shallow punctures.

*Ventral surface*.—Metasternal process behind middle coxae arcuate to nearly angulate, surface of metasternum rather finely granulate, longitudinally, deeply, rather broadly grooved on midline from posterior margin to past middle. First abdominal suture a little less distinct than others, surface granulate-punctate; outer face of anterior, middle, and hind tibiae more or less flat.

*Length*.—4.4 to 5.1 mm.

The male holotype (USNM no. 72495) and 2 paratypes (both males, I believe; in USNM) bear the data "Snow Hill, Md. Spring-1950, WHAnderson; reared from dead holly branch." Most of the abdomen of 1 paratype is missing with just the sternites present, and the entire abdomen of the other paratype is missing.

I find no differences between the genitalia of the holotype of *m. variabilis* and *m. mucoreus* Leconte. The external differences between these subspecies and the distribution are given in the key to *Xyletinus* species.

*Xyletinus obsoletus*, n. sp.

(Fig. 8)

*General*.—Elongate-robust, 1.7 to 1.9 times as long as wide, elytra widest at middle; body and head dark red-brown, head, pronotum, and, to a lesser extent, ventral surface and elytra clouded with black, appendages red-brown, antennae often lightest, sometimes nearly orange; pubescence of dorsal surface dark, blending into background, extremely short, very sparse, individual hairs separated on an average by a little less than their length, hairs of ventral surface longer, lighter in color, more prominent than those of dorsal surface, pubescence appressed throughout.

*Head*.—Front finely, very densely punctate, punctures varying in size; surface nearly evenly rounded throughout, but often with shallow depressions each side of midline near center. Eyes small, not or slightly bulging, eyes of ♂ separated by 5.0 to 5.7 times frontal width of an eye, those of female

separated by 6.2 to 7.0 times frontal width of an eye. Antennae of male about 0.4 times as long as body, that of female about 0.3 times as long as body, antenna of male with segments 4 through 10 serrate, basal segments of this portion a little wider than long and outer segments more elongate, longer than wide; antenna of female with segments 4 through 10 serrate, basal segments of this portion about as wide as long and outer segments longer than wide, last segment (both sexes) about 2 times as long as wide. Last segment of maxillary palpus (both sexes) about 2 times as long as wide, inner margin arcuate, tip blunt; last segment of labial palpus (both sexes) nearly triangular, longer than wide, inner angle very broadly rounded.

*Dorsal surface.*—Pronotum rounded nearly throughout, inflated at sides, male often with shallow depressions on disk each side of center, at base (both sexes) rather broadly depressed each side of center; surface of disk very finely, densely punctate, at side punctures larger, very dense, partially running together, surface thus finely scabrous; lateral margin sharp, explanate at posterior half, weaker before middle of side, usually broadly absent anteriorly, sometimes feebly indicated to near anterior margin, side of pronotum rounded at anterior 1/2. Scutellum a little wider than long, apex rounded. Elytra striate, each elytron with 10 complete, distinct, finely impressed grooves (a little weaker apically), plus a short scutellar, and 1 or 2 short striae at side below humerus, striae most deeply impressed below humerus, intervals flat, some more or less convex at apex; surface finely, densely punctate, punctures often running together and forming more or less distinct transverse ridges.

*Ventral surface.*—Metasternal process behind middle coxae arcuate, surface densely punctate, punctures varying in size; first abdominal suture less distinct than others, 5th segment of male shallowly depressed before apex, that of female shallowly depressed and with a small tubercle each side of depression; outer face of anterior and middle

tibiae shallowly concave except at base, outer face of hind tibia flat.

*Length.*—3.0 to 4.9 mm.

The male holotype, the allotype and 23 paratypes (9 males, 14 females) bear the data "Incline Village, Washoe Co. Nev., V-7-1971; House; C. W. Haas Collector; Nev. Dept. Agr. No. 71 E 10-3." Four paratypes are in the USNM, the holotype and the rest of the specimens are in NDA.

This species is nearest *X. fucatus* Leconte; the differences are given in the key to *Xyletinus* species.

*Xyletinus distans* Fall  
(Fig. 4, 5)

*Xyletinus distans* Fall, 1905, p. 200.

I have, for some years, confused one or the other of the species I herein described as *Euvrilletta californica* and *E. serricornis* with *Xyletinus distans*. The female type has recently been sent to me (no. 24666 in MCZ, with data "S. Madre, Cal.; June; distans, TYPE; M.C.Z. Type 24666") and a male paratype (in CAS, with data "SAN DIEGO, CAL.; *Xyletinus distans* Fall.; Blaisdell Collection.") so I can now assign the name with certainty. The locality at which the female type was collected is not given in the original description.

The male and female antennae of this species are illustrated.

#### Key to North American Species of *Euvrilletta*

1. Last 3 antennal segments as long as all 8 preceding together .....  
..... *xyletinoides* Fall
- Last 3 antennal segments no longer than 7 preceding together ..... 2
- 2(1). Hairs of dorsal surface entirely appressed, bristling hairs absent .....  
..... *serricornis* White
- Hairs of dorsal surface with both appressed and short, or minute, bristling hairs ..... 3
- 3(2). Length of each antennal segment of male from 4 through 7 subequal to width; Texas ..... *texasana* VanDyke
- Length of each antennal segment of male from 4 through 7 nearly 2 times width; California ..... *californica* White

#### Key to North American Species of *Xyletinus*

1. Body more elongate, 2.3 to 2.7 times as long as wide; eyes large, separated by 1.0 to 3.7 times frontal width of an eye ..... 2
- Body less elongate, 1.6 to 2.0 times as long as wide; eyes small, separated by 4 to 7 times frontal width of an eye ..... 9

2(1). Pubescence of dorsal surface with both appressed and short, or minute, bristling hairs .....	3
Pubescence of dorsal surface entirely appressed, bristling hairs absent .....	4
3(2). Head and pronotum red-brown, ventral surface predominantly dark brown, elytra orange-brown; Maryland .....	<i>mucoreus variabilis</i> White
Color nearly uniform red-brown to brown throughout; South Carolina to Florida to Texas .....	<i>m. mucoreus</i> Leconte
4(2). Antennal segments 9 through 11 together subequal in length to preceding 4 to 5 segments .....	5
Antennal segments 9 through 11 together subequal in length to preceding 5 to 7 segments .....	6
5(4). Side of pronotum distinctly rounded, lateral margin very narrow and not reflexed; eastern half of U. S. ....	<i>peltatus</i> (Harris)
Side of pronotum flat to weakly rounded, lateral margin rather broad and reflexed; northern U. S. and Canada .....	<i>harrisii</i> Fall
6(4). Metasternal carina adjacent to mesocoxae broadly, nearly evenly arcuate .....	7
Metasternal carina adjacent to mesocoxae not as above, angulate .....	8
7(6). Body orange-brown; pronotal lateral margins more broadly produced; striae weak; California .....	<i>distans</i> Fall
Body red-brown to brown; pronotal lateral margins narrower; striae strong; South Carolina to South Dakota .....	<i>brevis</i> White
8(6). Intermediate antennal segments longer than wide .....	<i>grossus</i> VanDyke
Intermediate antennal segments wider than long .....	<i>sequoiae</i> VanDyke
9(1). Tarsi elongate and slender, last segment 4 to 5 times as long as wide; Wyoming .....	<i>gracilipes</i> Fall
Tarsi stout, last segment not over 2 times as long as wide .....	10
10(9). Pubescence of elytra patterned, yellow with brown patches; southern Texas .....	<i>fasciatus</i> White
Pubescence of elytra unicolorous; various localities .....	11
11(10). Lateral margin of prothorax incomplete (fig. 8) .....	<i>obsoletus</i> White
Lateral margin of prothorax complete (fig. 7) .....	12
12(11). Outer face of anterior tibia concave only at apical half; Texas .....	<i>pubescens</i> Leconte
Outer face of anterior tibia concave throughout; various localities .....	13
13(12). Eyes larger, separated by 4.0 to 4.5 times frontal width of an eye (males) .....	14
Eyes smaller, separated by 5 to 7 times frontal width of an eye (females) .....	15
14(13). First two abdominal segments with a median longitudinal line of erect hairs .....	<i>lugubris</i> Leconte
First two abdominal segments lacking a line of erect hairs .....	<i>fucatus</i> Leconte
15(13). Intermediate segments of antennae two times as wide as long .....	<i>lugubris</i> Leconte
Intermediate segments of antennae but slightly wider than long .....	<i>fucatus</i> Leconte

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#### Reference

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